

ABSTRACT

The lithographic printing plate precursor of the present invention comprises a substrate 11 and a lipophilic layer 12 deposited on the substrate 11 wherein the lipophilic layer 12 comprises a cross-linked product obtained by cross-linking a polymer having a thermally decomposable group on the main chain with a cross-linker. The lithographic printing plate precursor can be directly prepared by irradiating it with an infrared laser beam based on digital signals and mounted on a printer for printing in its existent state after exposure without developing, the lithographic printing plate precursor having an excellent ablation rate (sensitivity) and the obtained lithographic printing plate having an excellent plate life. The preparation method for a printing plate of the present invention is characterized by the fact that the lithographic printing plate precursor of the present invention is exposed to an infrared laser beam to remove the lipophilic layer in the exposed area.